

JUL 23 2007

Application No.: 10/008235

Case No.: 55393US011

REMARKS

Upon entry of the Amendment above, claims 8-24, 26-27, 64, 66, 68-71, and 76-77 will be pending in this application. By this Amendment, claims 8, 64, and 70 have been amended, and claims 25, 65, 67, 72, and 73 have been cancelled.

Claims 8, 64, and 70 have been amended to incorporate the language of cancelled claims 65, 67, 72, and 73. Claims 8, 64, and 70 now recite that the compositions are "free" of (i) alkoxyated radiation curable monomers comprising main-chain alkoxyated functionality and (ii) trifunctional monomers having a plurality of radiation curable moieties.

§ 112 Rejections of the Claims

Claims 8-27, 64-73 and 76-77 have been rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicants traverse the rejection to the extent it is maintained.

The Office action stated that the recitation "wherein ... comprises less than 10 weight percent of an alkoxyated, radiation curable monomer comprising main-chain alkoxyated functionality" was not supported by the specification as originally filed. The claims have been amended to recite that the composition is "free" of an alkoxyated, radiation curable monomer comprising main-chain alkoxyated functionality. Support can be found at, e.g. paragraph 55 of the published application where it is stated that "preferred reactive diluents comprise no more than about 10 weight percent of such alkoxyated monomers." This, taken in conjunction with the Examples that disclose compositions free of such monomers, provides support for the amendment.

Withdrawal of the rejection is respectfully requested.

§ 103 Rejection of the Claims

Claims 8-27, 64-73 and 76-77 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over WO 99/29787. Applicants traverse the rejection to the extent that it is maintained.

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The Office Action appears to state that, because WO 99/29787 lists components and specific compounds, recited in the present claims, it would have been obvious to select the components or specific compounds in the appropriate ratios to arrive at the compositions recited in claims 8-27, 64-73 and 76-77. Applicants respectfully disagree and assert that one would not arrive at the present claims upon reading WO 99/29787.

Claims 8-24, 26-67, and 76

Present claims 8-24, 26-27, and 76 recite compositions comprising a reactive diluent comprising:

- (i) a high Tg component,
- (ii) 0.1 to 50 weight percent of an adhesion promoting component comprising at least one of a heterocyclic radiation curable monomer, and/or a monomer comprising a pendant alkoxyated moiety, and
- (iii) at least one multifunctional monomer having a plurality of radiation curable moieties,

wherein the compositions are free of

- (i) trifunctional monomers having a plurality of radiation curable moieties, and
- (ii) alkoxyated radiation curable monomers comprising main-chain alkoxyated functionality.

As described in the present specification, selection of components having such functional characteristics result in durable, weather-resistant, ink jettable compositions. The inclusion of each component serves a purpose towards achieving such properties. While WO 99/29787 may disclose the various components, a reasoned statement (absent hindsight) as to why one would select the claimed components appears to be absent in the Office Action.

With regard to the compositions being free of alkoxyated radiation curable monomers comprising main-chain alkoxyated functionality, the Office Action states that WO 99/29787 does not require such monomers. However, several examples of such difunctional acrylates are disclosed in WO 99/29787, and all of the Examples in WO 99/29787 appear to include such monomers (e.g., Actilane 422, Actilane 430, and Sartomer 306).

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With regard to the compositions being free of trifunctional monomers having a plurality of radiation curable moieties, the Office Action states that such monomers are optional in the compositions as disclosed in WO 99/29787. However, WO 99/29787 would suggest to one skilled in the art that such trifunctional monomers would be desirably present, stating, at page 16, "If used in an amount less than 10% by weight, the properties of the print obtained from the ink, and in particular hardness and scratch resistance, may tend to suffer."

A fair reading of WO 99/29787, in the absence of hindsight, leads to the conclusion that one would not have been lead to arrive at compositions according to claims 8-24, and 26-27 based on the teachings of WO 99/29787. Accordingly, claims 8-24, and 26-27 are not obvious in light of WO 99/29787.

Claims 64, 66, 68 and 69

Claims 64, 66, 68 and 69 compositions comprising a reactive diluent comprising:

- (i) a high Tg component,
- (ii) an adhesion promoting component comprising at least one of a heterocyclic radiation curable monomer, and/or a monomer comprising a pendant alkoxyated moiety, and
- (iii) at least one multifunctional monomer having a plurality of radiation curable moieties,

wherein the compositions are free of

- (i) trifunctional monomers having a plurality of radiation curable moieties, and
- (ii) alkoxyated radiation curable monomers comprising main-chain alkoxyated functionality.

As discussed above with regard to claims 8-24, 26-27, and 76, one would not have arrived at claims 64, 66, 68 and 69 upon reading WO 99/29787 without the use of hindsight. Accordingly, claims 64, 66, 68 and 69 are not obvious in light of WO 99/29787.

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Claims 70, 71, and 77

Claims 70, 71, and 77 recite compositions comprising a radiation curable reactive diluent comprising (i) isobornyl (meth)acrylate; (ii) tetrabydrofurfuryl (meth)acrylate, and (iii) hexanediol di(meth)acrylate; wherein the fluid composition (i) is free of an alkoxyated, radiation curable monomer comprising main-chain alkoxyated functionality, (ii) is free of trifunctional monomers having a plurality of radiation curable moieties and (iii) has an elongation of at least 50% in a cured state.

As discussed above with regard to the other pending claims, one would not have arrived at a composition having the recited monomers; specifically isobornyl (meth)acrylate (high Tg), tetrabydrofurfuryl (meth)acrylate (heterocyclic adhesion promoter), and hexanediol di(meth)acrylate (difunctional), and being free of alkoxyated, radiation curable monomers comprising main-chain alkoxyated functionality and trifunctional monomers having a plurality of radiation curable moieties upon reading WO 99/29787 without the use of hindsight. Further one would have no expectation that such compositions could have an elongation of at least 50% in a cured state. Accordingly, claims 70, 71 and 77 are not obvious in light of WO 99/29787.

Withdrawal of the rejection is respectfully requested.

Obviousness-Type Double Patenting

Claims 8-27, 64-73 and 76-77 have been rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 1-18 of US Patent No. 6,534,128 and claims 1-6 of US Patent No. 6,558,753. Applicants defer response to this rejection given the amendments to the claims.

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Conclusion

In view of the foregoing, Applicants respectfully request reconsideration of the merits of the application.

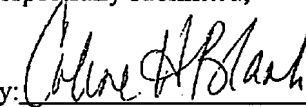
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Respectfully submitted,

July 23, 2007

Date

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